

Restoration of Operations ACTD (RestOps)
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## What is RestOps?



#### Before/during/after attack actions necessary to protect against and immediately react to the consequences of a Chem or Bio attack at a fixed site

- Protect personnel and sensitive equipment prior to attack
- Detect, identify, and warn of CB attack
- Decontaminate personnel and personal equipment
- Determine extent of contamination
- Decontaminate critical equipment/facilities necessary to restore and sustain operations
- Determine impacts on Operating Tempo (OPTEMPO) (sortie generation/force and materiel flow/medical/logistics)



## RestOps Objectives



- <u>Demonstrate</u> tools and technologies to mitigate effects of CB attack on fixed site to support war plans
- <u>Demonstrate</u> Operational Concepts and Tactics/Techniques/ Procedures (TTPs) for restoring ops at fixed sites
- Incorporate lessons learned into Joint and Service doctrine
- Identify potential improvements in U.S. policy for CONUS and OCONUS RestOps Contingencies

Restore critical facility operations to minimize impact on the warfight



#### **Key Participants & Roles**





Osan Air Base, ROK - Demonstration Site -

Dugway **Proving Ground** - Technical Testing -

> **Air Force Operational Test & Eval Center**

- Military Utility Assessment -

**Defense Threat** Reduction Agency

\* Executive Agent \*

- Technical Manager -

**Central Command** 

- Supporting CINC\* -

**US Air Force** 

- Lead Service -

**Pacific Command** 

- Sponsoring CINC \* -

**Pacific Air Forces** 

- Operational Manager -

13 Time Zones & Thousands of participants

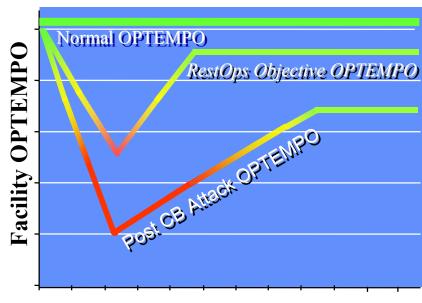
Commander-in-Chief



#### **Potential Benefits**



- Improved site response to CBW threat/attack
  - Integrated sensor/early warning network
  - Better decontamination capability
  - Improved medical response
  - Better understanding of operational impact of CB attack on warfighter and support operations



**Degradation & Recovery Over Time** (notional values)

- Quicker recovery of site operating tempo
  - Sortie generation
  - Throughput of personnel/equipment

Decreased vulnerability of fixed sites to CBW attack



## RestOps WILL NOT:



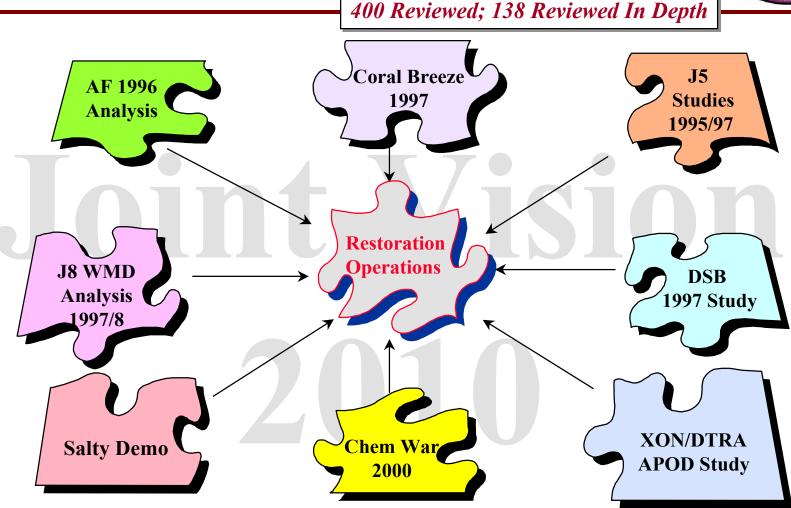
- Develop new equipment
- Perform Research & Development (R&D)
- Resolve all Seaport of Debarkation and Seaport of Embarkation (SPOD/E) issues
- Push Operating Procedures and equipment on services
- Determine the Origins of the Universe





# Literature Analysis



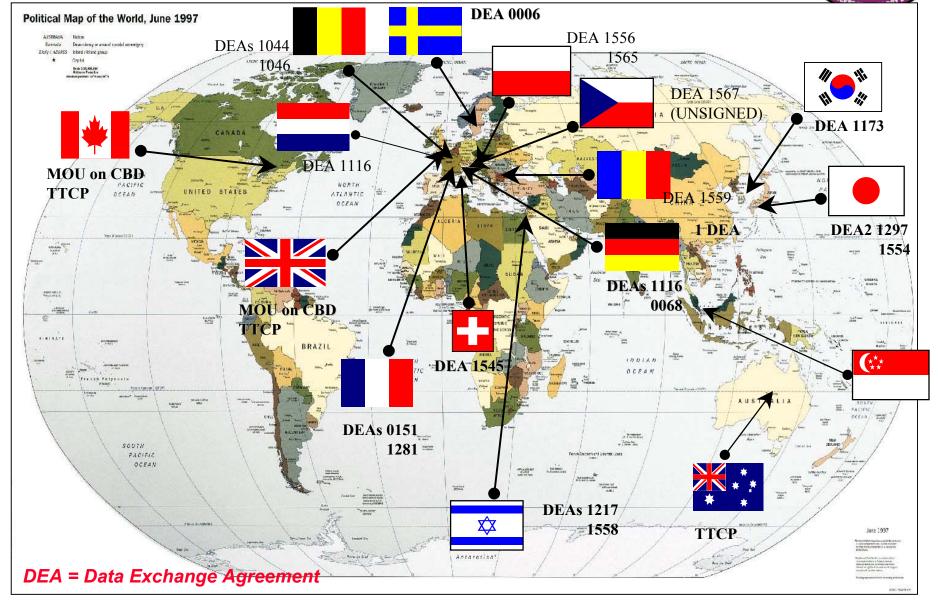


It's time to stop admiring the problem...



# RestOps International Invitations





# Base Operations & Infrastructure









**Engineer Operations** 

**Command Center** 



**Command and Control** 



Housing

**Maintenance Operations** 

Strategic Lift & Time Phased Force Deployment Data (TPFDD) Flow Inter-Theater Lift



**Fueling** operations

**Fighter Sortie Generation** 

**Ammunition & Warehouse Operations** 



**Hospital & Medical Operations** 



Air Defense Operations

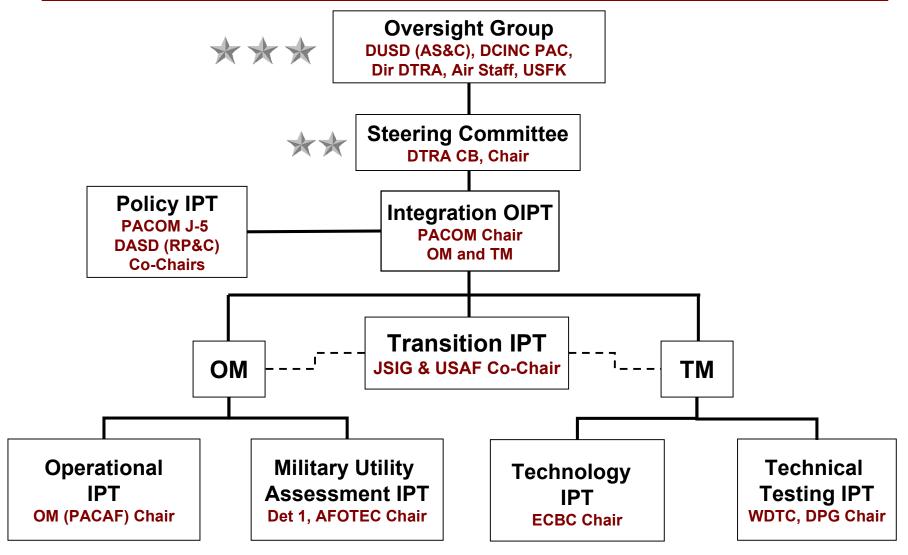
& Patriot Batteries







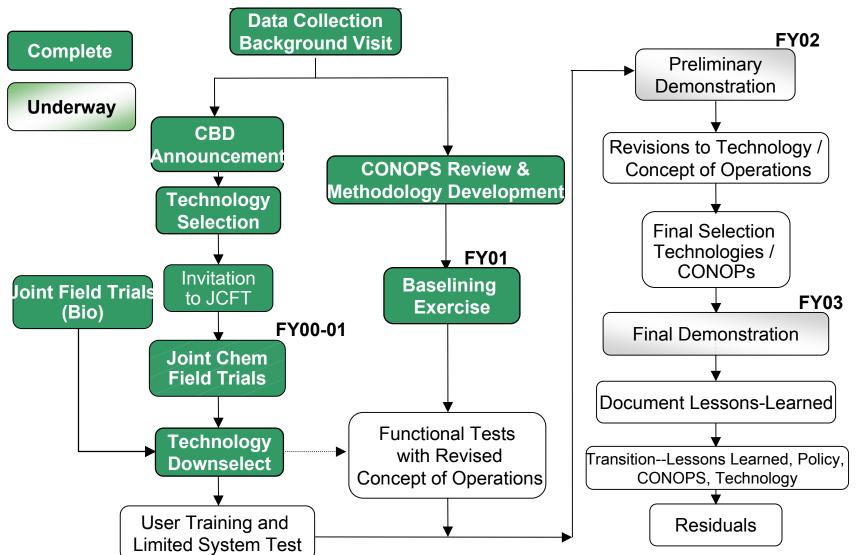
#### Management Structure





### RestOps Approach







#### Baseline Exercise





Characterize Osan Air Base's capability to respond to CB attacks -- both to protect against and immediately react to the consequences of a CB attack -- in order to restore operating tempo (OPTEMPO) as quickly as possible.





#### **Baseline Exercise**

#### Scope



- Conducted 10-16 Feb 01
- 450+ data collector/exercise control team looked at seven base mission areas:
  - Sortie generation
  - Defensive capability
  - C2/WOC
  - TPFDD flow
  - Base support operations
  - Other than US forces (HNS) support
  - Medical



- Mission areas further divided into 18 Functional Areas:
  - 43 data collection "nodes" within 18 areas
  - Areas chosen for CBD impact on mission, measurement
  - Nodes show data collector posts



#### Measurement Areas

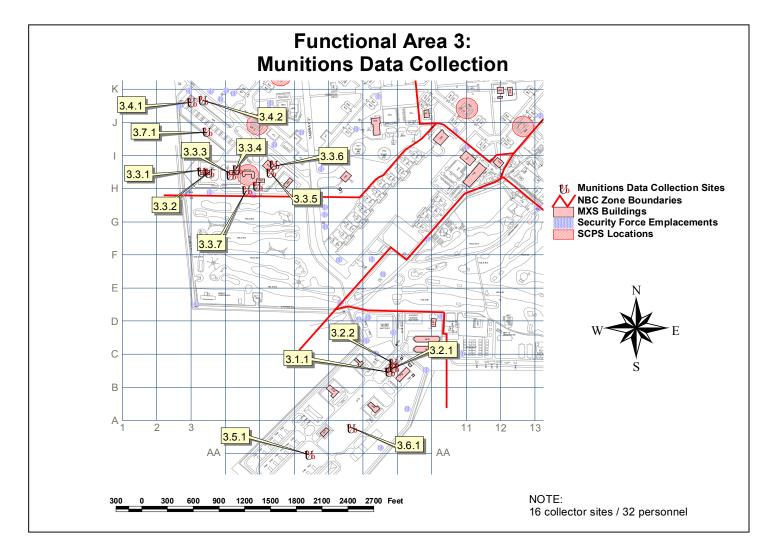


Number	Name			
1	F-16 (36th FS)			
2	A-10 (25th FS)			
3	Munitions (storage, build, and pre-load			
4	Flight Line Maintenance (51st MXS)			
5	Fuels (Supply)			
6	Command and Control (C2)			
7	Communications (51st CS)			
8	CE Readiness (51st CEX)			
9	Civil Engineering (51st CES)			
10	Air Mobility (631st AMSS)			
11	Security Forces (51st SFS)			
12	Services (51st SVS)			
13	Patriot (1-43rd ADA)			
14	Firefighting (CE)			
15	Transportation (51st TRNS)			
16	Medical (51st MDG)			
17	Logistics (51st LSS)			
18	Supply (51st SUPS)			

#### DTRA Data

# Data Collector Layout Sample







#### **Next Steps**



- Conduct data analysis and prepare report
  - Exercise Report due out 25 July 01
  - Incorporate lessons learned into Feb 02 Preliminary Demo
- Brief ACTD senior management on baseline analysis
- Begin preparations for Preliminary Demonstration



# Transition CONOPS /Technologies Actions



- Recommend Joint Doctrine changes (policy implications)
- Recommend operational doctrine changes to the Services
- Assist in developing training packages for the Services and Joint schools (equipment, base ops, C2)
- Assist in placing fixed site CB Defense CONOPS in service MOS producing and leadership schools (command, staff, and senior service schools)
- Assist services and CINC in placing fixed site CB Defense CONOPS into the major warfighting exercise process
- Residual equipment support (2 yrs) at Osan AB
- Assist accelerated acquisition of equipment selected
- Assist Services to POM for new equipment and sustainment support



# RestOps Master Schedule



FY99	FY00	FY01	FY02	FY03	FY04
Official AC	TD Start 🔷	•	Transition Planning	Transition Technology	•
Concept Analysis	Development  ACTD Analyt	Refinement tic Methodology	• •	ransition Lessons Learne	d
Background Visit	Baseline Exer	cise 🔷			
	Joint Field Trial Biological Defen	se		raining	Ĭ
Technology	Review Joint Cher Field Tri		election	•	
	Template Co Mtg	ord Training / S  Preliminary Demonstra	ystem Functional Tests ation		
		Pre-Demo Mi	litary Utility Assessmen		
			Final Demonstra  —  Final Demo Milita	tion ACTE  Try Utility Assessment	Final Report
				Residual	Support



# Final Thoughts



- RestOps is fully funded to demonstrate Tactics, Techniques & Procedures (TTPs) and technology for CB defense at a fixed site
- ACTD will leverage:
  - Recently completed, on-going & planned studies and live agent testing to refine understanding of post attack CBW contamination hazards
  - Non-DoD Research & Development programs to include Department of Energy and international community
- CDR 7th Air Force is the customer and determines leavebehind capabilities
- Goal -- identify generic fixed site needs for restoration operations
  - Osan Air Base demonstration applied to bigger picture for all fixed sites





#### **Questions?**

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# Back Ups







Warfighter Request: Initiate an exercise (ACTD) to demonstrate processes, procedures and technology needed to quickly restore operations at a port or airfield following a CB attack.



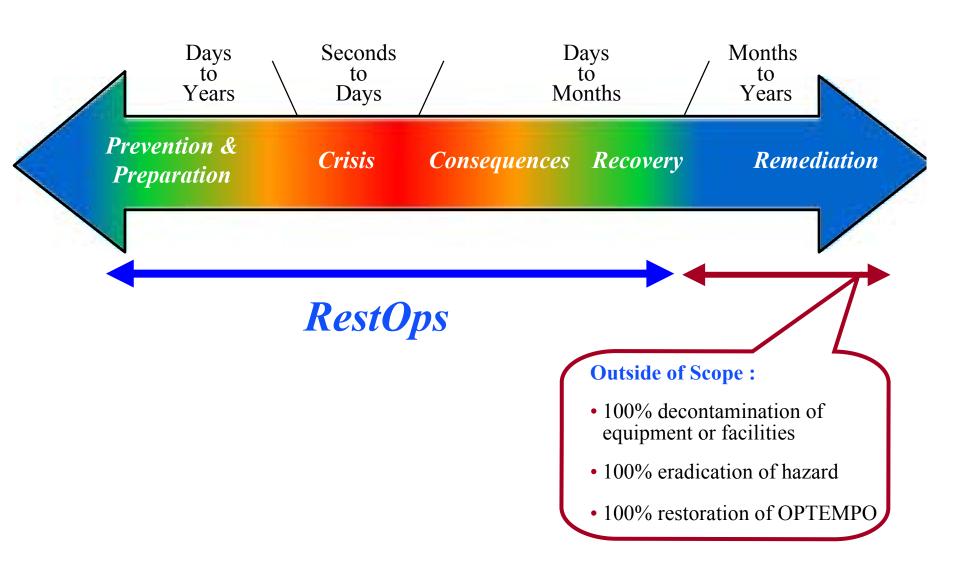


Recent Studies Highlight Problem: Establishing responsibility and providing the capability required to restore OPTEMPO at fixed sites (airports and seaports of embarkation / debarkation) after a CB attack critical to power projection strategy.



# Spectrum of CB Defense







#### **User Needs**



- Better Operational Concepts/TTPs
  - Decontamination of Strategic
     Lift
  - Decontamination Waste Control
  - Contaminated Casualty Handling
- Improved Technologies
  - Mobile BW Detection
  - CB Contamination Marking
  - Aircraft & Equipment Decontamination
  - Patient Decontamination
  - CB Absorbent Barrier Materials

- Planning Tools
  - CBW sensor integration / placement
  - CBW sensor vulnerability assessment

- Science & technology to support resolution of Policy issues
  - Civil Reserve Air Fleet / Merchant Marine operations in CBW environment
  - Protection of critical Host Nation
     Support resources
  - Handling of contaminated remains